WHAT IS CLAIMED IS:

1. A purified peptide selected from the group consisting of peptides comprising the amino acid sequence Leu Lys Ile Gln Pro Ser Glu Pro Arg Asp Ser Ala Val Tyr Leu Cys Ala (SEQ ID NO:3), Leu Thr Ile Gln Arg Thr Gln Gln Glu Asp Ser Ala Val Tyr Leu Cys Ala (SEQ ID NO:4), Leu Ile Leu Glu Ser Ala Ser Thr Asn Gln Thr Ser Met Tyr Leu Cys Ala (SEQ ID NO:5), Leu Thr Val Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser (SEQ ID NO:6), Leu Ala Ile Ser Gly Leu Glu Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala (SEQ ID NO:7), Phe Thr Ile Ser Gly Leu Gln Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Gln (SEQ ID NO:8), Leu Thr Ile Ser Gly Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln (SEQ ID NO:9), Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Phe Cys Ser (SEQ ID NO:10) and Leu Thr Ile Asn Pro Val Glu Ala Asp Asp Val Ala Thr Tyr Tyr Cys Gln (SEQ ID NO:11), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Lys Leu Thr Val Val (SEQ ID NO:12), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Glu Leu Thr Val Val (SEQ ID NO:13), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Asp Leu Thr Val Val (SEQ ID NO:14), and Thr Phe Gly Xaa Gly Thr Yaa, wherein Xaa is any amino acid and Yaa is Arg, Lys, Asp, Glu, His or other charged amino acid molecule (SEQ ID NO:15).

2. A purified peptide consisting of the amino acid sequence Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Arg Leu Thr Val Val (SEQ ID NO:2).

3. A purified derivative of the peptide according to claim 1 or 2.

4. A purified derivative of a peptide consisting of the sequence Cys Lys Pro Ile Ser Gly His Asn Ser Leu Phe Trp Tyr Arg Gln Thr (SEQ ID NO:1).

5. A pharmaceutical composition comprising a peptide or peptide derivative according to claim 1, 2, 3 or 4 and a pharmaceutically acceptable carrier.

6. A method to increase production of at least one Th1 cytokine or to decrease production of at least one Th2 cytokine comprising administering an effective amount of a peptide selected from the group consisting of peptides comprising the amino acid sequence Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Arg Leu Thr Val Val (SEQ ID NO:2), Leu Lys Ile Gln Pro Ser Glu Pro Arg Asp Ser Ala Val Tyr Leu Cys Ala (SEQ ID NO:3), Leu Thr Ile Gln Arg Thr Gln Gln Glu Asp Ser Ala Val Tyr Leu Cys Ala (SEQ ID NO:4), Leu Ile Leu Glu Ser Ala Ser Thr Asn Gln Thr Ser Met Tyr Leu Cys Ala (SEQ ID

NO:5), Leu Thr Val Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser (SEQ ID NO:6), Leu Ala Ile Ser Gly Leu Glu Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala (SEQ ID NO:7), Phe Thr Ile Ser Gly Leu Gln Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Gln (SEQ ID NO:8), Leu Thr Ile Ser Gly Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln (SEQ ID NO:9), Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Phe Cys Ser (SEQ ID NO:10) and Leu Thr Ile Asn Pro Val Glu Ala Asp Asp Val Ala Thr Tyr Tyr Cys Gln (SEQ ID NO:11), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Lys Leu Thr Val Val (SEQ ID NO:12), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Glu Leu Thr Val Val (SEQ ID NO:13), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Asp Leu Thr Val Val (SEQ ID NO:14), and Thr Phe Gly Xaa Gly Thr Yaa, wherein Xaa is any amino acid and Yaa is Arg, Lys, Asp, Glu, His or other charged amino acid molecule (SEQ ID NO:15), or a derivative thereof, to an individual in an amount sufficient to increase production of at least one Th1 cytokine or decrease production of at least one Th2 cytokine.

7. A method to increase production of at least one Th1 cytokine or to decrease production of at least one Th2 cytokine in an individual free of infection with an immunodeficiency-type retrovirus comprising administering an effective amount of a peptide selected from the group consisting of peptides comprising the amino acid sequence Cys Lys Pro Ile Ser Gly His Asn Ser Leu Phe Trp Tyr Arg Gln Thr (SEQ ID NO:1), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Arg Leu Thr Val Val (SEQ ID NO:2), Leu Lys Ile Gln Pro Ser Glu Pro Arg Asp Ser Ala Val Tyr Leu Cys Ala (SEQ ID NO:3), Leu Thr Ile Gln Arg Thr Gln Gln Glu Asp Ser Ala Val Tyr Leu Cys Ala (SEQ ID NO:4), Leu Ile Leu Glu Ser Ala Ser Thr Asn Gln Thr Ser Met Tyr Leu Cys Ala (SEQ ID NO:5), Leu Thr Val Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser (SEQ ID NO:6), Leu Ala Ile Ser Gly Leu Glu Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala (SEQ ID NO:7), Phe Thr Ile Ser Gly Leu Gln Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Gln (SEQ ID NO:8), Leu Thr Ile Ser Gly Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln (SEQ ID NO:9), Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Phe Cys Ser (SEQ ID NO:10) and Leu Thr Ile Asn Pro Val Glu Ala Asp Asp Val Ala Thr Tyr Tyr Cys Gln (SEQ ID NO:11), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Lys Leu Thr Val Val (SEQ ID NO:12), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Glu Leu Thr Val Val (SEQ ID NO:13), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Asp Leu Thr Val Val (SEQ ID NO:14), and Thr Phe Gly Xaa Gly Thr Yaa, wherein Xaa is any amino acid and Yaa is Arg, Lys, Asp, Glu, His or other charged amino acid molecule (SEQ ID NO:15), or a derivative thereof, to an individual free of infection with an immunodeficiency-type retrovirus in an amount sufficient to increase production of at least one Th1 cytokine or decrease production of at least one Th2 cytokine.

8. A method of delaying the onset of AIDS, comprising administering a peptide selected from the group consisting of peptides comprising the amino acid sequence Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Arg Leu Thr Val Val (SEQ ID NO:2), Leu Lys Ile Gln Pro Ser Glu Pro Arg Asp Ser Ala Val Tyr Leu Cys Ala (SEQ ID NO:3), Leu Thr Ile Gln Arg Thr Gln Gln Glu Asp Ser Ala Val Tyr Leu Cys Ala (SEQ ID NO:4), Leu Ile Leu Glu Ser Ala Ser Thr Asn Gln Thr Ser Met Tyr Leu Cys Ala (SEQ ID NO:5), Leu Thr Val Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser (SEQ ID NO:6), Leu Ala Ile Ser Gly Leu Glu Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala (SEQ ID NO:7), Phe Thr Ile Ser Gly Leu Gln Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Gln (SEQ ID NO:8), Leu Thr Ile Ser Gly Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln (SEQ ID NO:9), Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Phe Cys Ser (SEQ ID NO:10) and Leu Thr Ile Asn Pro Val Glu Ala Asp Asp Val Ala Thr Tyr Tyr Cys Gln (SEQ ID NO:11), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Lys Leu Thr Val Val (SEQ ID NO:12), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Glu Leu Thr Val Val (SEQ ID NO:13), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Asp Leu Thr Val Val (SEQ ID NO:14), and Thr Phe Gly Xaa Gly Thr Yaa, wherein Xaa is any amino acid and Yaa is Arg, Lys, Asp, Glu, His or other charged amino acid molecule (SEQ ID NO:15), or a derivative thereof, to an individual infected with an immunodeficiency-type retrovirus in an amount sufficient to delay the onset of AIDS.

9. The method according to claim 8, wherein the immunodeficiency-type retrovirus is HIV and the individual is a human.

10. The method according to claim 8, wherein the immunodeficiency-type retrovirus is feline immunodeficiency virus.

11. A method of delaying the onset of AIDS, comprising administering a derivative of a peptide comprising the sequence Cys Lys Pro Ile Ser Gly His Asn Ser Leu Phe Trp Tyr Arg Gln Thr (SEQ ID NO:1) to an individual infected with an immunodeficiency-type retrovirus in an amount sufficient to delay the onset of AIDS.

12. The method according to claim 11, wherein the immunodeficiency-type retrovirus is HIV and the individual is a human.

13. The method according to claim 11, wherein the immunodeficiency-type retrovirus is feline immunodeficiency virus.

14. A method for reversing the deleterious effects of infection with an immunodeficiency-type retrovirus, comprising administering a peptide selected from the group consisting of peptides comprising the amino acid sequence Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Arg Leu Thr Val Val (SEQ ID NO:2), Leu Lys Ile Gln Pro Ser Glu Pro Arg Asp Ser Ala Val Tyr Leu Cys Ala (SEQ ID NO:3), Leu Thr Ile Gln Arg Thr Gln Gln Glu Asp Ser Ala Val Tyr Leu Cys Ala (SEQ ID NO:4), Leu Ile Leu Glu Ser Ala Ser Thr Asn Gln Thr Ser Met Tyr Leu Cys Ala (SEQ ID NO:5), Leu Thr Val Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser (SEQ ID NO:6), Leu Ala Ile Ser Gly Leu Glu Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala (SEQ ID NO:7), Phe Thr Ile Ser Gly Leu Gln Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Gln (SEQ ID NO:8), Leu Thr Ile Ser Gly Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln (SEQ ID NO:9), Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Phe Cys Ser (SEQ ID NO:10) and Leu Thr Ile Asn Pro Val Glu Ala Asp Asp Val Ala Thr Tyr Tyr Cys Gln (SEQ ID NO:11), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Lys Leu Thr Val Val (SEQ ID NO:12), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Glu Leu Thr Val Val (SEQ ID NO:13), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Asp Leu Thr Val Val (SEQ ID NO:14), and Thr Phe Gly Xaa Gly Thr Yaa, wherein Xaa is any amino acid and Yaa is Arg, Lys, Asp, Glu, His or other charged amino acid molecule (SEQ ID NO:15), or a derivative thereof, to an individual infected with an immunodeficiency-type retrovirus in an amount sufficient to reverse the deleterious effects of infection with an immunodeficiency-type retrovirus.

15. The method according to claim 14, wherein the immunodeficiency-type retrovirus is HIV and the individual is a human.

16. A method for the prevention or treatment of a disease or disorder of the cardiovascular system, comprising administering a peptide selected from the group consisting of peptides comprising the amino acid sequence Cys Lys Pro Ile Ser Gly His Asn Ser Leu Phe Trp Tyr Arg Gln Thr (SEQ ID NO:1), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Arg Leu Thr Val Val (SEQ ID NO:2), Leu Lys Ile Gln Pro Ser Glu Pro Arg Asp Ser Ala Val Tyr Leu Cys Ala (SEQ ID NO:3), Leu Thr Ile Gln Arg Thr Gln Gln Glu Asp Ser Ala Val Tyr Leu Cys Ala (SEQ ID NO:4), Leu Ile Leu Glu Ser Ala Ser Thr Asn Gln Thr Ser Met Tyr Leu Cys Ala (SEQ ID NO:5), Leu Thr Val Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser (SEQ ID NO:6), Leu Ala Ile Ser Gly Leu Glu Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala (SEQ ID NO:7), Phe Thr Ile Ser Gly Leu Gln Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Gln (SEQ ID NO:8), Leu Thr Ile Ser Gly Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln (SEQ ID NO:9), Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu

Gly Val Tyr Phe Cys Ser (SEQ ID NO:10) and Leu Thr Ile Asn Pro Val Glu Ala Asp Asp Val Ala Thr Tyr Tyr Cys Gln (SEQ ID NO:11), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Lys Leu Thr Val Val (SEQ ID NO:12), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Glu Leu Thr Val Val (SEQ ID NO:13), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Asp Leu Thr Val Val (SEQ ID NO:14), and Thr Phe Gly Xaa Gly Thr Yaa, wherein Xaa is any amino acid and Yaa is Arg, Lys, Asp, Glu, His or other charged amino acid molecule (SEQ ID NO:15), or a derivative thereof, to an individual in an amount sufficient to treat or prevent a disease or disorder of the cardiovascular system.

17. The method according to claim 16 wherein the disease or disorder is selected from the group consisting of atherosclerosis, arteriosclerosis, atherosclerotic heart disease, reperfusion injury, cardiac arrest, myocardial infarction, thrombus formation, and retrovirus-induced cardiovascular dysfunction.

18. A method for the prevention or treatment of an allergic disease or disorder characterized by increased IgE production, comprising administering a peptide selected from the group consisting of peptides comprising the amino acid sequence Cys Lys Pro Ile Ser Gly His Asn Ser Leu Phe Trp Tyr Arg Gln Thr (SEQ ID NO:1), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Arg Leu Thr Val Val (SEQ ID NO:2), Leu Lys Ile Gln Pro Ser Glu Pro Arg Asp Ser Ala Val Tyr Leu Cys Ala (SEQ ID NO:3), Leu Thr Ile Gln Arg Thr Gln Gln Glu Asp Ser Ala Val Tyr Leu Cys Ala (SEQ ID NO:4), Leu Ile Leu Glu Ser Ala Ser Thr Asn Gln Thr Ser Met Tyr Leu Cys Ala (SEQ ID NO:5), Leu Thr Val Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser (SEQ ID NO:6), Leu Ala Ile Ser Gly Leu Glu Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala (SEQ ID NO:7), Phe Thr Ile Ser Gly Leu Gln Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Gln (SEQ ID NO:8), Leu Thr Ile Ser Gly Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln (SEQ ID NO:9), Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Phe Cys Ser (SEQ ID NO:10) and Leu Thr Ile Asn Pro Val Glu Ala Asp Asp Val Ala Thr Tyr Tyr Cys Gln (SEQ ID NO:11), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Lys Leu Thr Val Val (SEQ ID NO:12), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Glu Leu Thr Val Val (SEQ ID NO:13), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Asp Leu Thr Val Val (SEQ ID NO:14), and Thr Phe Gly Xaa Gly Thr Yaa, wherein Xaa is any amino acid and Yaa is Arg, Lys, Asp, Glu, His or other charged amino acid molecule (SEQ ID NO:15), or a derivative thereof, to an individual in an amount sufficient to treat or prevent an allergic disease or disorder characterized by increased IgE production.

19. The method according to claim 18 wherein said allergic disease or disorder characterized by increased IgE production is selected from the group consisting of allergy, asthma, delayed hypersensitivity, septic shock, and anaphylactic shock.

20. A method for inhibiting the growth of a solid tumor or reducing the volume of a solid tumor, comprising administering a peptide selected from the group consisting of peptides comprising the amino acid sequence Cys Lys Pro Ile Ser Gly His Asn Ser Leu Phe Trp Tyr Arg Gln Thr (SEQ ID NO:1), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Arg Leu Thr Val Val (SEQ ID NO:2), Leu Lys Ile Gln Pro Ser Glu Pro Arg Asp Ser Ala Val Tyr Leu Cys Ala (SEQ ID NO:3), Leu Thr Ile Gln Arg Thr Gln Gln Glu Asp Ser Ala Val Tyr Leu Cys Ala (SEQ ID NO:4), Leu Ile Leu Glu Ser Ala Ser Thr Asn Gln Thr Ser Met Tyr Leu Cys Ala (SEQ ID NO:5), Leu Thr Val Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser (SEQ ID NO:6), Leu Ala Ile Ser Gly Leu Glu Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala (SEQ ID NO:7), Phe Thr Ile Ser Gly Leu Gln Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Gln (SEQ ID NO:8), Leu Thr Ile Ser Gly Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln (SEQ ID NO:9), Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Phe Cys Ser (SEQ ID NO:10) and Leu Thr Ile Asn Pro Val Glu Ala Asp Asp Val Ala Thr Tyr Tyr Cys Gln (SEQ ID NO:11), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Lys Leu Thr Val Val (SEQ ID NO:12), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Glu Leu Thr Val Val (SEQ ID NO:13), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Asp Leu Thr Val Val (SEQ ID NO:14), and Thr Phe Gly Xaa Gly Thr Yaa, wherein Xaa is any amino acid and Yaa is Arg, Lys, Asp, Glu, His or other charged amino acid molecule (SEQ ID NO:15), or a derivative thereof, to an individual with a solid tumor in an amount sufficient to inhibit the growth of the solid tumor or to reduce the volume of the solid tumor.

21. The method according to claim 20 wherein the solid tumor is selected from the group consisting of sarcomas, carcinomas, lymphomas and other solid tumor cancers.

22. The method according to claim 21 wherein the solid tumor is a tumor of the germ line or is a tumor of the central nervous system, or is a breast cancer tumor, prostate cancer tumor, cervical cancer tumor, uterine cancer tumor, lung cancer tumor, ovarian cancer tumor, testicular cancer tumor, thyroid cancer tumor, astrocytoma, glioma, pancreatic cancer tumor, stomach cancer tumor, liver cancer tumor, colon cancer tumor, or a melanoma tumor.

23. A method for preventing immunosuppression or suppressing progression to immune dysfunction or cytokine dysregulation in an individual infected with a viral, fungal or bacterial infectious agent other than an immunodeficiency-type retrovirus, comprising administering a peptide selected from the group consisting of peptides comprising the amino acid sequence Cys Lys Pro Ile Ser Gly His Asn Ser Leu Phe Trp Tyr Arg Gln Thr (SEQ ID NO:1), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Arg Leu Thr Val Val (SEQ ID NO:2), Leu Lys Ile Gln Pro Ser Glu Pro Arg Asp Ser Ala Val Tyr Leu Cys Ala (SEQ ID NO:3), Leu Thr Ile Gln Arg Thr Gln Gln Glu Asp Ser Ala Val Tyr Leu Cys Ala (SEQ ID NO:4), Leu Ile Leu Glu Ser Ala Ser Thr Asn Gln Thr Ser Met Tyr Leu Cys Ala (SEQ ID NO:5), Leu Thr Val Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser (SEQ ID NO:6), Leu Ala Ile Ser Gly Leu Glu Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala (SEQ ID NO:7), Phe Thr Ile Ser Gly Leu Gln Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Gln (SEQ ID NO:8), Leu Thr Ile Ser Gly Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln (SEQ ID NO:9), Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Phe Cys Ser (SEQ ID NO:10) and Leu Thr Ile Asn Pro Val Glu Ala Asp Asp Val Ala Thr Tyr Tyr Cys Gln (SEQ ID NO:11), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Lys Leu Thr Val Val (SEQ ID NO:12), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Glu Leu Thr Val Val (SEQ ID NO:13), Ala Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Asp Leu Thr Val Val (SEQ ID NO:14), and Thr Phe Gly Xaa Gly Thr Yaa, wherein Xaa is any amino acid and Yaa is Arg, Lys, Asp, Glu, His or other charged amino acid molecule (SEQ ID NO:15), or a derivative thereof, to an individual infected with a viral, fungal or bacterial infectious agent in an amount sufficient to prevent immunosuppression or suppress progression to immune dysfunction or cytokine dysregulation in the infected individual.

24. The method according to claim 6 or 7 in which the Th1 cytokine is selected from the group consisting of interleukin 2 and interferon-γ.

25. The method according to claim 6 or 7 in which the Th2 cytokine is selected from the group consisting of interleutkin-4, interleukin 5, interleukin 6, interleukin 10 and immunoglobulin G.